

A1
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- (a2) about 5 - 80 % by weight of a styrene-containing copolymer containing about 19 - 50 % by weight of acrylonitrile or methacrylonitrile;
 - (B) about 5 - 60 parts by weight of a polyphenylene ether resin;
 - (C) about 2 - 40 parts by weight of a compatibilizer comprising
 - (c1) a styrene-containing copolymer containing about 5 - 18 % by weight of acrylonitrile in the copolymer per 100 parts by weight of the sum of (A) and (B) or
 - (c2) a styrene-containing graft copolymer having up to about 60% by weight of rubber wherein the compatibilizer contains about 5 - 18 % by weight of acrylonitrile in the copolymer excluding rubber, per 100 parts by weight of the sum of (A) and (B); and
 - (D) about 5 - 30 parts by weight of an aromatic phosphoric acid ester per 100 parts by weight of the sum of (A) and (B),
- wherein the resin composition contains less than 3% by weight of polycarbonate based on the total weight of the composition.
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A2

Claim 15 (Once amended). A flameproof thermoplastic resin composition comprising:

- (A) about 40 - 95 parts by weight of a rubber modified styrene-containing resin comprising
 - (a₁) about 20 - 95 % by weight of a styrene-containing graft copolymer resin containing about 19 - 50 % by weight of acrylonitrile or methacrylonitrile in the copolymer excluding rubber and
 - (a₂) about 5 - 80 % by weight of a styrene-containing copolymer containing about 19 - 50 % by weight of acrylonitrile or methacrylonitrile;
- (B) about 5 - 60 parts by weight of a polyphenylene ether resin;
- (C) about 2 - 40 parts by weight of a compatibilizer comprising

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- (c1) a styrene-containing copolymer containing about 5 - 18 % by weight of acrylonitrile in the copolymer per 100 parts by weight of the sum of (A) and (B) or
 - (c2) a styrene-containing graft copolymer having up to about 60% by weight of rubber wherein the compatibilizer contains about 5 - 18 % by weight of acrylonitrile in the copolymer excluding rubber, per 100 parts by weight of the sum of (A) and (B); and
 - (D) about 5 - 30 parts by weight of an aromatic phosphoric acid ester per 100 parts by weight of the sum of (A) and (B),
wherein the resin composition contains about 0 % by weight of phenolic resin, red phosphorous, and silicone resin based on the total weight of the composition.
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A3

Claim 23 (Once amended). A flameproof thermoplastic resin composition substantially free of phenolic resin and red phosphorous comprising:

- (A) about 40 - 95 parts by weight of a rubber modified styrene-containing resin comprising
 - (a1) about 20 - 95 % by weight of a styrene-containing graft copolymer resin containing about 19 - 50 % by weight of acrylonitrile or methacrylonitrile in the copolymer excluding rubber and
 - (a2) about 5 - 80 % by weight of a styrene-containing copolymer containing about 19 - 50 % by weight of acrylonitrile or methacrylonitrile;
- (B) about 5 - 60 parts by weight of a polyphenylene ether resin;
- (C) about 2 - 40 parts by weight of a compatibilizer comprising
 - (c1) a styrene-containing copolymer containing about 5 - 18 % by weight of acrylonitrile in the copolymer excluding rubber, per 100 parts by weight of the sum of (A) and (B) or
 - (c2) a styrene-containing graft copolymer having up to about 60% by weight of rubber wherein the compatibilizer contains about 5 - 18 % by weight of acrylonitrile in the copolymer excluding rubber, per 100 parts by weight of the sum of (A) and (B); and

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(D) about 5 - 30 parts by weight of an aromatic phosphoric acid ester per 100 parts by weight of the sum of (A) and (B),

wherein the resin composition contains about 0% by weight silicone resin based on the total weight of the composition.

Claim 24 (Once amended). A flameproof thermoplastic resin composition substantially free of phenolic resin and red phosphorous comprising:

(A) about 40 - 95 parts by weight of a rubber modified styrene-containing resin comprising

(a1) about 20 - 95 % by weight of a styrene-containing graft copolymer resin containing about 19 - 50 % by weight of acrylonitrile or methacrylonitrile in the copolymer excluding rubber and

(a2) about 5 - 80 % by weight of a styrene-containing copolymer containing about 19 - 50 % by weight of acrylonitrile or methacrylonitrile;

(B) about 5 - 60 parts by weight of a polyphenylene ether resin;

(C) about 2 - 40 parts by weight of a compatibilizer comprising

(c1) a styrene-containing copolymer containing about 5 - 18 % by weight of acrylonitrile in the copolymer excluding rubber, per 100 parts by weight of the sum of (A) and (B) or

(c2) a styrene-containing graft copolymer having up to about 60% by weight of rubber wherein the compatibilizer contains about 5 - 18 % by weight of acrylonitrile in the copolymer excluding rubber, per 100 parts by weight of the sum of (A) and (B); and

(D) about 5 - 30 parts by weight of an aromatic phosphoric acid ester per 100 parts by weight of the sum of (A) and (B),

wherein the resin composition contains less than 3 % by weight of polycarbonate based on the total weight of the composition, wherein the resin composition is produced in a two-step process comprising

a first step (i) preparing a master batch containing about 40 - 95 parts by weight of polyphenylene ether (PPE) (B), about 5 - 60 parts by weight of compatibilizer (C) having about 5

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- 18 % by weight of acrylonitrile content, and about 0 - 30 parts by weight of aromatic phosphoric acid ester compound (D) at about 250 - 300 °C of molding temperature; and a subsequent second step (ii) adding a rubber modified styrene-containing resin (A) and aromatic phosphoric acid ester compound (D) to the master batch and extruding the resulting mixture at about 200 - 260 °C.

Claim 25 (Once amended). A method of producing a flameproof thermoplastic resin composition substantially free of phenolic resin and red phosphorous and contains less than 3 % by weight of polycarbonate based on the total weight of the composition wherein the resin composition comprises

- (A) about 40 - 95 parts by weight of a rubber modified styrene-containing resin comprising
- (a1) about 20 - 95 % by weight of a styrene-containing graft copolymer resin containing about 19 - 50 % by weight of acrylonitrile or methacrylonitrile in the copolymer excluding rubber and
 - (a2) about 5 - 80 % by weight of a styrene-containing copolymer containing about 19 - 50 % by weight of acrylonitrile or methacrylonitrile;
- (B) about 5 - 60 parts by weight of a polyphenylene ether resin;
- (C) about 2 - 40 parts by weight of a compatibilizer comprising
- (c1) a styrene-containing copolymer containing about 5 - 18 % by weight of acrylonitrile in the copolymer excluding rubber, per 100 parts by weight of the sum of (A) and (B) or
 - (c2) a styrene-containing graft copolymer having up to about 60% by weight of rubber wherein the compatibilizer contains about 5 - 18 % by weight of acrylonitrile in the copolymer excluding rubber, per 100 parts by weight of the sum of (A) and (B); and
- (D) about 5 - 30 parts by weight of an aromatic phosphoric acid per 100 parts by weight of the sum of (A) and (B),
- wherein the method is a two-step process comprising